

REMARKS

Claims 1-2, 5-6, and 13 stand rejected under 35 U.S.C. 102(e) as being anticipated by Ryonai et al. (U.S. Patent No. 6,242,085). Applicant respectfully traverses this rejection because the cited reference does not disclose (or suggest) the claimed first layer including a plurality of islands formed on the substrate. An underlayer is formed on the first layer.

Ryonai, as shown in FIG. 1, discloses an underlying layer 2 formed directly on a glass substrate 1. Ryonai does not disclose (or suggest) that an underlayer is formed on a plurality of islands that are formed on the substrate, as now recited in amended independent claims 1 and 2. Moreover, Ryonai discloses in FIG. 3 and column 3, lines 61-63, that “the magnetic layer 3 comprises magnetic grain clusters 6 and grain boundary substances 7 between the clusters.” In the present invention, however, the plurality of islands formed on the substrate are fully covered by the Cr underlayer as shown in FIG. 2B and 2C. The islands are formed by nucleating the 1 nm thick C090Pt10 film and, then, a 19 nm thick Cr underlayer is formed (page 10, lines 16-29). For these reasons, claims 1 and 2 and their dependent claims 3-6 and 13 are allowable over Ryonai et al.

Claims 1-3, 5-6, and 13 stand rejected under 35 U.S.C. 102(e) as being anticipated by Sakawaki et al. (U.S. Pub. No. 2002/0160234). Applicant respectfully traverses this rejection because Sakawaki et al. also does not disclose (or suggest) the claimed first layer including a plurality of islands formed on the substrate.

Sakawaki, as shown in FIG. 1, discloses an orientation-determining layer 2 formed on the substrate 1, and a non-magnetic undercoat layer 3 and a magnetic layer 4 are formed on the orientation-determining layer 2.

In Sakawaki et al., the undercoat layer 3 is not formed on a layer which includes a plurality of islands that are formed on the substrate. Therefore, claims 1-3, 5-6 and 13 are allowable over Sakawaki et al., also.

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Ryonai et al. in view of Takahashi et al. Applicant respectfully traverses this rejection for the reasons given above traversing the rejections of claim 1, from which claim 4 depends, and because of the additional features recited in claim 4.

Moreover, the Cr-Cap of the present invention is different from the simple protective overlayer of Takahashi et al. in that it promotes diffusion of Cr. “The steps include a step of forming a Cr cap layer thereby to promote the isolation of magnetic grains and to reduce noise, and a subsequent step of promoting Cr segregation in the magnetic grain boundaries by post annealing” (page 9, lines 29-33). Therefore, even if combined, the cited

references still would not disclose or suggest the features of claim 4. For all of the foregoing reasons, Applicant submits that this Application is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

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By:

A handwritten signature in dark ink, appearing to read "B. Joe Kim", written over a horizontal line.

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